

X. *An Account of an Experiment touching the Ascent of Water between two Glass Planes, in an Hyperbolick Figure.* By Mr. Francis Hauksbee, F. R. S.

I Took two Glass Planes, each somewhat more than 20 Inches long, of the truest Surfaces I could procure. These being held close together at one of their Ends, the other Ends were opened exactly to an Angle of 20 Minutes. In this Form they were edgeways put into a Trough of ting'd Water, which immediately arose between them in the Figure of the annex Scheme. *See Fig. 7.* At another time the Planes were opened to an Angle of 40 Minutes; then the Water appear'd between them, as in the Scheme with that Title. By these Schemes *See Fig. 6.* the Proportions of the Power of Attraction are in some measure evident to the Eye; for there may be seen at the several Distances, how many Lines (which are 12ths of Inches) the Water is elevated, and the prodigious Increase of them near the touching Ends. I hope the Tables are pretty accurate; for after many tryals, I find the Successes to be much the same, according to the different Angles. This Experiment was first made by Mr. Brook Taylor, as appears by his Letter to Dr. Hans Sloane, R. S. Secr. but he confesses his Apparatus not nice enough to discover exactly the Figure which the Water made between the Planes.

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*A Table according to the Scheme of the Planes opened to an Angle of 40 Minutes. in Fig. 6.*

| Distances in Inches and Parts of Inches from the touching Ends. | Number of Lines elevated at the several Distances. |
|-----------------------------------------------------------------|----------------------------------------------------|
|-----------------------------------------------------------------|----------------------------------------------------|

|                   |           |                   |
|-------------------|-----------|-------------------|
| 9.                | — — — — — | 1.                |
| 6.                | — — — — — | 2.                |
| 4 $\frac{3}{4}$ . | — — — — — | 3.                |
| 3.                | — — — — — | 4 $\frac{3}{4}$ . |
| 2 $\frac{1}{2}$ . | — — — — — | 6.                |
| 2.                | — — — — — | 7 $\frac{1}{2}$ . |
| 1 $\frac{1}{2}$ . | — — — — — | 10.               |
| 1 $\frac{1}{4}$ . | — — — — — | 12.               |
| 1.                | — — — — — | 15.               |
| 0 $\frac{3}{4}$ . | — — — — — | 19.               |
| 0 $\frac{1}{2}$ . | — — — — — | 28.               |
| 0 $\frac{1}{4}$ . | — — — — — | 50.               |

*A Table according to the Scheme of the Planes opened to an Angle of 20 Minutes, in Fig. 7.*

| Distances in Inches and Parts of Inches from the touching Ends. | Number of Lines elevated at the several Distances. |
|-----------------------------------------------------------------|----------------------------------------------------|
|-----------------------------------------------------------------|----------------------------------------------------|

|                   |           |                    |
|-------------------|-----------|--------------------|
| 13.               | — — — — — | 1.                 |
| 9.                | — — — — — | 2.                 |
| 7.                | — — — — — | 3.                 |
| 5.                | — — — — — | 3 $\frac{3}{4}$ .  |
| 5.                | — — — — — | 5.                 |
| 4.                | — — — — — | 6 $\frac{3}{4}$ .  |
| 3.                | — — — — — | 9.                 |
| 2 $\frac{1}{2}$ . | — — — — — | 12.                |
| 2.                | — — — — — | 15 $\frac{1}{2}$ . |
| 1 $\frac{3}{4}$ . | — — — — — | 18.                |
| 1 $\frac{1}{2}$ . | — — — — — | 21 $\frac{1}{2}$ . |
| 1.                | — — — — — | 27 $\frac{1}{2}$ . |
| 1.                | — — — — — | 35.                |
| 0 $\frac{3}{4}$ . | — — — — — | 50.                |
| 0 $\frac{1}{2}$ . | — — — — — | 76.                |

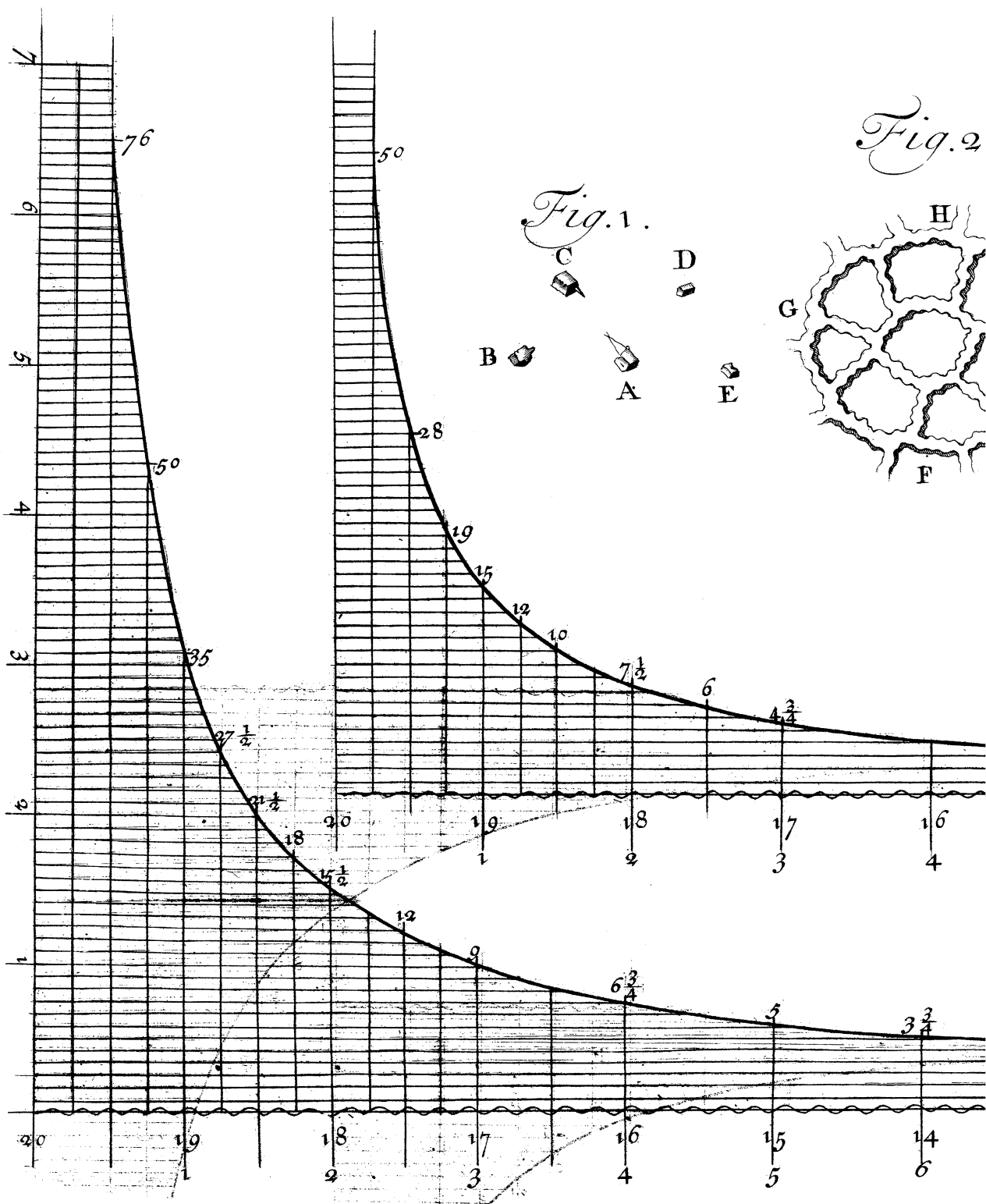


Fig. 2.

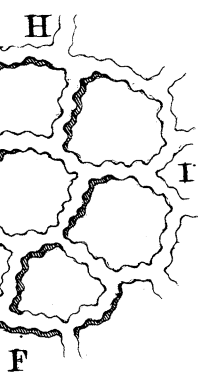


Fig. 3.

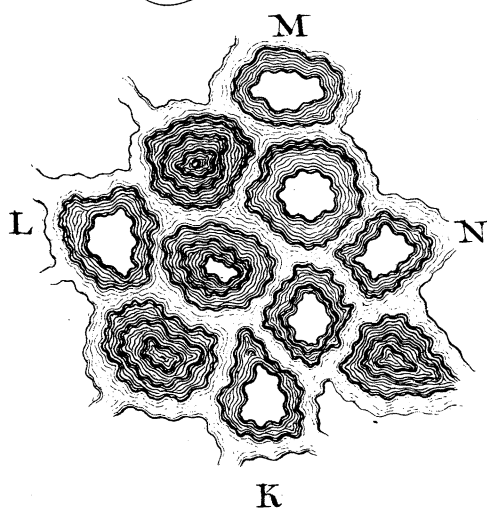


Fig. 4.

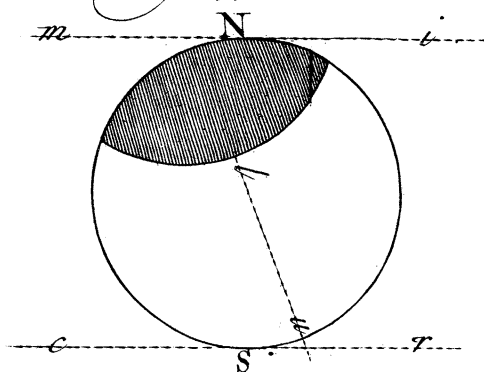


Fig. 6.

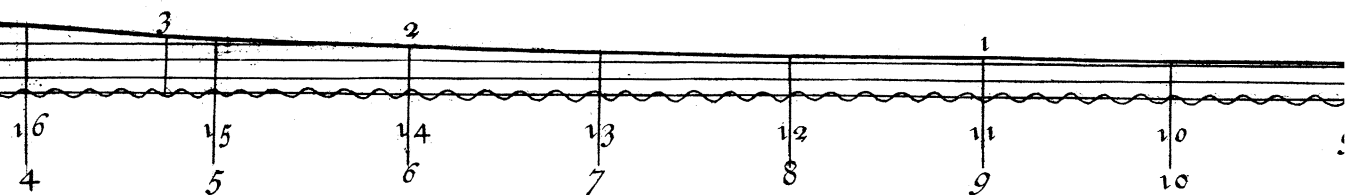
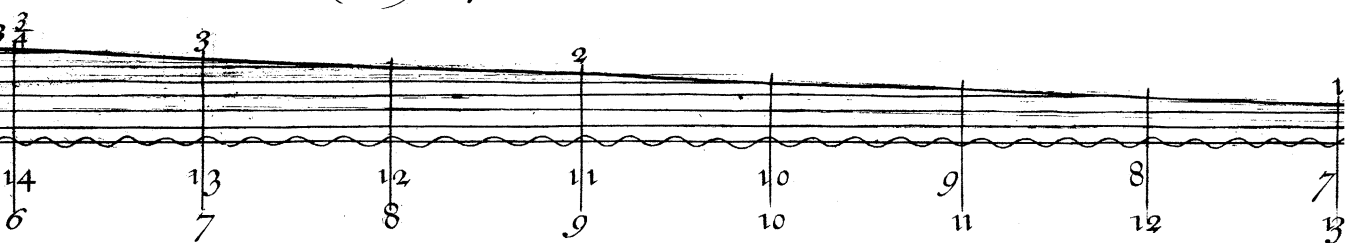


Fig. 7.



*Fig. 5.*

